

Public Health Preparedness and Situational Awareness Report: #2019:41

Reporting for the week ending 10/12/19 (MMWR Week #41)

October 18th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

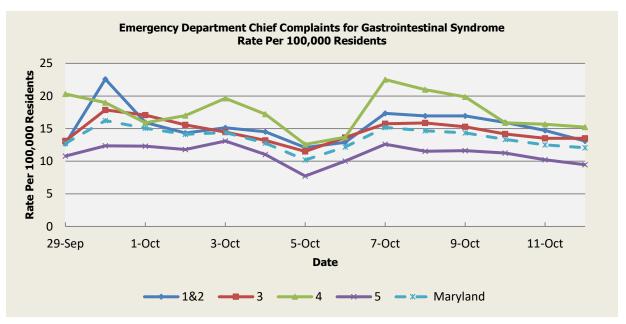
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

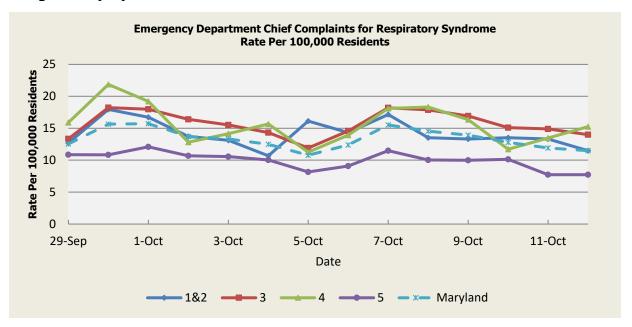


There were two (2) Gastrointestinal Syndrome outbreaks reported this week; One (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 5), One (1) outbreak of Gastroenteritis/Foodborne associated with a Catered Event at a Farm (Region 3)

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.30	15.09	15.94	10.26	13.15		
Median Rate*	13.11	14.87	15.46	10.17	13.02		

^{*} Per 100,000 Residents

Respiratory Syndrome

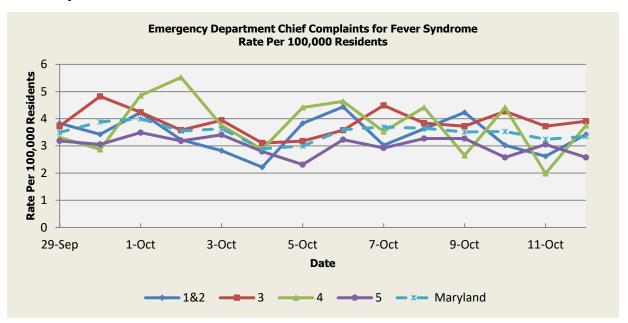


There was one (1) Respiratory Syndrome outbreak reported this week; 1 outbreak of Legionellosis associated with a Hotel (Region 4)

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.62	14.70	15.05	9.94	12.73		
Median Rate*	12.10	14.14	14.35	9.60	12.25		

^{*} Per 100,000 Residents

Fever Syndrome

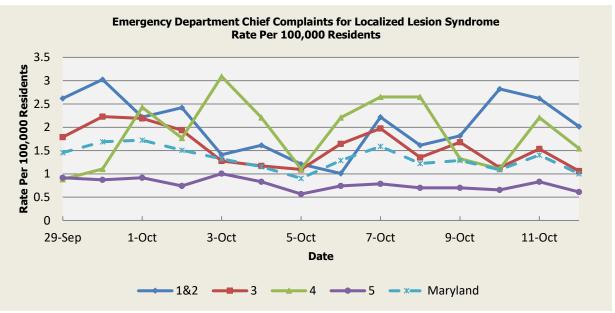


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	3.08	3.90	4.12	3.04	3.52		
Median Rate*	3.02	3.80	3.97	2.92	3.40		

*Per 100,000 Residents

Localized Lesion Syndrome

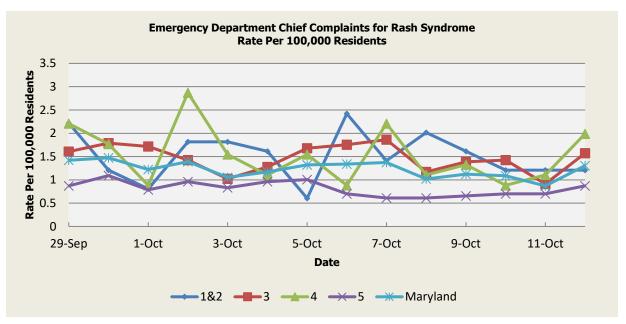


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.16	1.79	2.05	0.91	1.42		
Median Rate*	1.01	1.72	1.99	0.87	1.37		

^{*} Per 100,000 Residents

Rash Syndrome

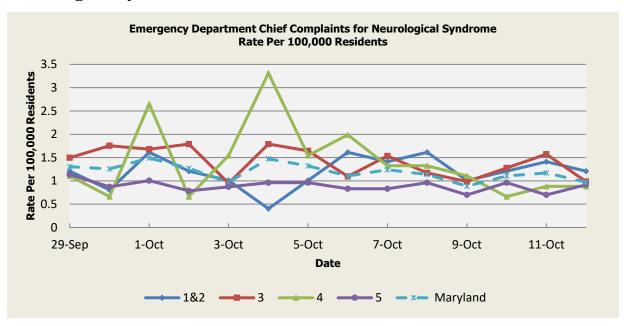


There was one Rash Syndrome outbreak reported this week; one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 5)

	Rash Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	1.25	1.68	1.76	0.98	1.38		
Median Rate*	1.21	1.61	1.77	0.92	1.32		

^{*} Per 100,000 Residents

Neurological Syndrome

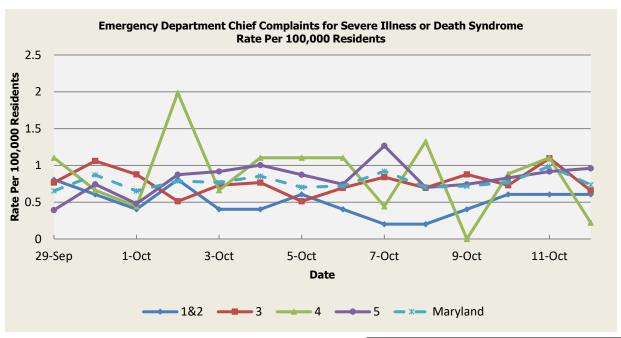


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.78	0.96	0.87	0.61	0.80		
Median Rate*	0.81	0.88	0.66	0.57	0.72		

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



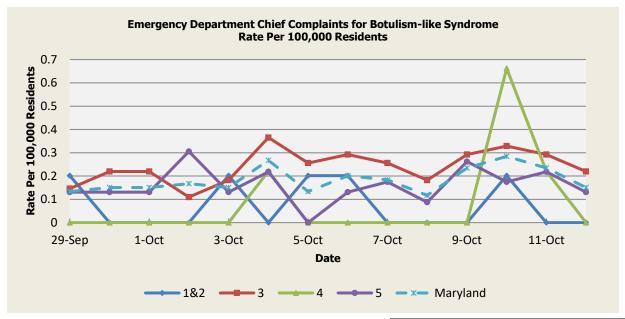
There were no Severe Illness or Death Syndrome outbreaks reported this week.

		Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylan								
Mean Rate*	0.66	0.90	0.84	0.52	0.73				
Median Rate*	0.60	0.84	0.66	0.48	0.70				

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

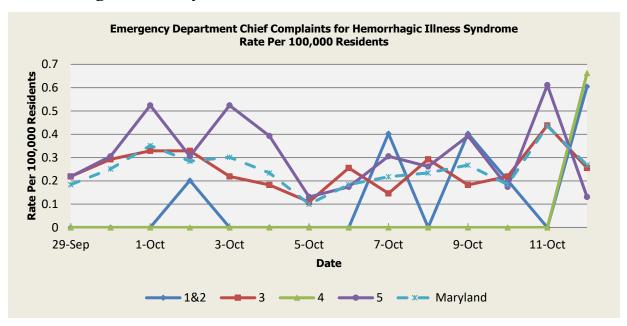


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 9/29 (Region 1&3), 10/2 (Region 5), 10/3 (Region 1&2), 10/4 (Regions 3,4,5), 10/5 (Regions 1&2,3), 10/6 (Regions 1&2,3), 10/7 (Regions 3,5), 10/9 (Regions 3,5), 10/10 (Regions 1&2,3,4,5), 10/11 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.07	0.12	0.06	0.08	0.10		
Median Rate*	0.00	0.11	0.00	0.04	0.08		

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

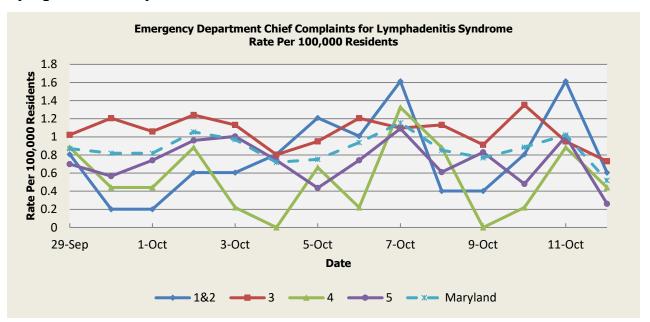


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome 9/30 (Region 5), 10/1 (Regions 3,5), 10/2 (Regions 1&2,3,5), 10/3 (Region 5), 10/4 (Region 5), 10/7 (Regions 1&2,5), 10/8 (Region 5), 10/9 (Regions 1&2,5), 10/10 (Region 1&2), 10/11 (Regions 3,5), 10/12 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.04	0.16	0.04	0.13	0.13			
Median Rate*	0.00	0.11	0.00	0.09	0.08			

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 9/29 (Regions 1&2,4), 9/30 (Region 3), 10/2 (Regions 3,4), 10/3 (Region 5), 10/4 (Region 1&2), 10/5 (Region 1&2), 10/6 (Regions 1&2,3), 10/7 (Regions 1&2,4,5), 10/8 (Region 4), 10/9 (Region 5), 10/10 (Regions 1&2,3), 10/11 (Regions 1&2, 4,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.38	0.59	0.40	0.39	0.48		
Median Rate*	0.40	0.51	0.44	0.35	0.44		

^{*} Per 100,000 Residents

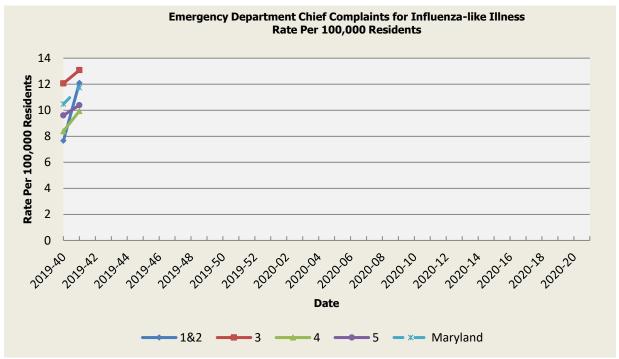
MARYLAND REPORTABLE DISEASE SURVEILLANCE

deportable disease data from the National Electronic Disease Surveillance System (NEDSS) that eds into ESSENCE is currently being validated. We will include these data in future reports note the validation process is complete.
(report continues on next page

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 41 was: Minimal Intensity and Sporadic geographic activity.

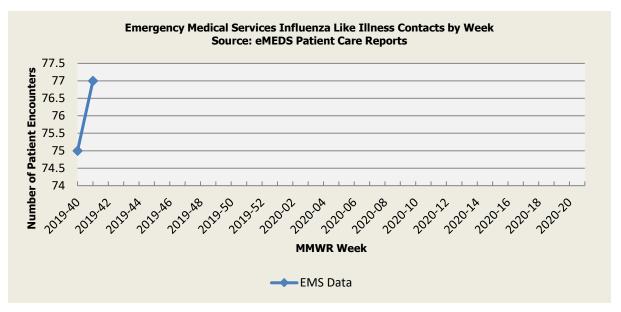
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.13	13.22	12.73	11.19	12.15	
Median Rate*	7.66	10.19	9.27	8.73	9.35	

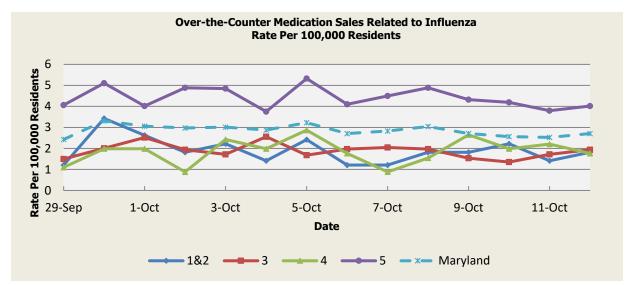
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

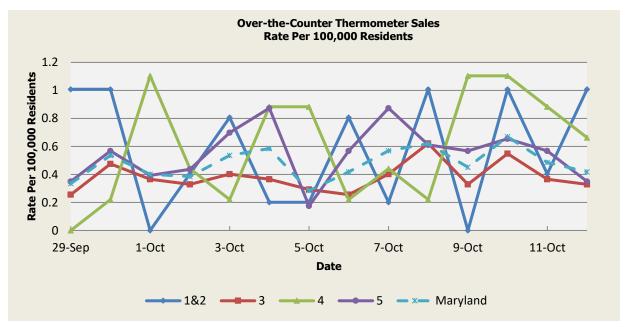


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.46	4.45	2.67	7.79	5.51
Median Rate*	2.82	3.58	2.21	7.03	4.75

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.93	2.80	2.23	3.71	3.11
Median Rate*	2.62	2.70	2.21	3.62	3.05

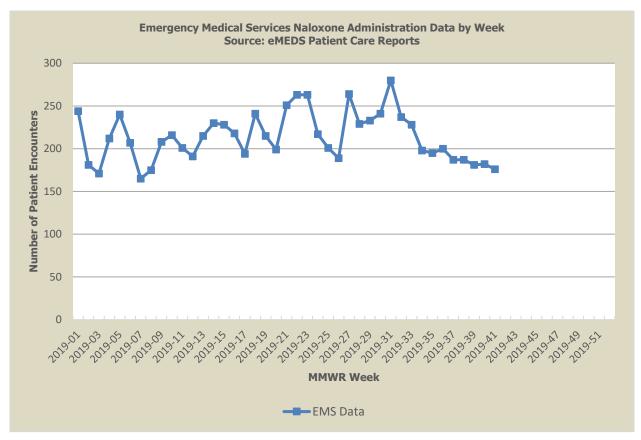
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

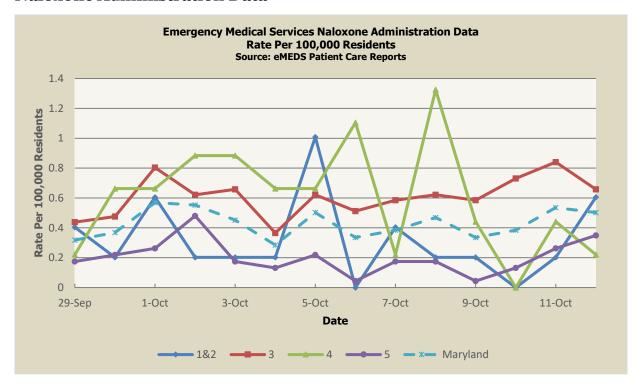
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 17th, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (FRANCE), 11 Oct 2019, A duck farm in central France has detected a low-pathogenic H5 bird flu virus, the World Organization for Animal Health confirmed. The mild strain of the virus was found among a flock of 2600 ducks in Marolle-en-Sologne, Loir-et-Cher administrative department. Read More: https://www.promedmail.org/post/6722413

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

SCOMBROID FISH POISONING (ALASKA), 18 Oct 2019, the state is warning Alaskans about the risk of eating fish not properly refrigerated or preserved. According to a state of Alaska epidemiology bulletin, 7 patients this summer [2019] were diagnosed with scombroid poisoning. Read More: https://www.promedmail.org/post/6733493

EASTERN EQUINE ENCEPHALITIS (MULTISTATE), 16 Oct 2019, On 4 Oct 2019, Michigan Department of Agriculture and Rural Development (MDARD) officials reported another equine case of eastern equine encephalomyelitis (EEE) and another horse with West Nile virus (WNV). Read More: https://www.promedmail.org/post/6730944

LEGIONELLOSIS (**NORTH CAROLINA**),16 Oct 2019, Officials with the North Carolina Department of Health and Human Services' [NCDHHS'] Division of Public Health have confirmed a 2nd death in the outbreak of _Legionella_ bacteria, which has now infected dozens of Mountain State Fair attendees with the potentially life-threatening Legionnaires' disease. Read More: https://www.promedmail.org/post/6722645

POWASSAN VIRUS ENCEPHALITIS (CONNECTICUT), 11 Oct 2019, The Department of Public Health has reported 4 cases of Powassan virus disease. The cases were identified from 1 Jan through 31 Aug [2019]. Read More: https://www.promedmail.org/post/6721101

INTERNATIONAL DISEASE REPORTS

E. COLI EHEC (**UNITED KINGDOM**), 17 Oct 2019, Public Health England is investigating an _E. coli_ O157 outbreak with people sick across the country. One infection is in a 4-year-old child from Hampshire who needed treatment at Southampton General Hospital after a trip to the Isle of Wight. Read More: https://www.promedmail.org/post/6731974

TULAREMIA (**SWEDEN**), 17 Oct 2019, During the 1st week of August 2019, an unusually large number of human tularemia cases were reported to the Public Health Agency of Sweden (PHAS) from other locations, mainly in neighboring counties to Gavleborg in central Sweden. Read More: https://www.promedmail.org/post/6732811

ANTHRAX (**RUSSIA**), 16 Oct 2019, A total of 3 people were taken to hospital in the village of Novokuli, Russia's Dagestan, with suspected Siberian plague [anthrax]. Read More: https://www.promedmail.org/post/6730639

TRYPANOSOMIASIS (**SOUTH AFRICA**), 16 Oct 2019, East African trypanosomiasis (EAT) has been confirmed in an expatriate working in conservation research in the Vwaza Marsh Game Reserve, Malawi. Read More: https://www.promedmail.org/post/6730249

YELLOW FEVER (NIGERIA), 16 Oct 2019, The Bauchi State Primary Health Care Development Agency has confirmed 6 new recorded deaths in the yellow fever outbreak in the state which brings the total number of deaths to 22. Read More: https://www.promedmail.org/post/6729323

WEST NILE VIRUS (EUROPE), 16 Oct 2019, between 4 and 10 Oct 2019, EU Member States reported 9 human cases in Romania (5), Greece (3), and Hungary (1). 13 cases were reported from EU neighboring countries in Israel (10) and Serbia (3). Read More: https://www.promedmail.org/post/6725739

ANTHRAX (**NAMIBIA**), 15 Oct 2019, A total of 115 cases of anthrax in humans have been reported in the northern regions of the country, after they allegedly came into contact with, or consumed meat of suspected anthrax-infected carcasses. Read More: https://www.promedmail.org/post/6728318

TYPHOID FEVER (IRELAND), 15 Oct 2019, The Health Protection Surveillance Centre in Ireland reported an increase in typhoid fever notifications in travelers returning from Pakistan. Read More: https://www.promedmail.org/post/6727235

RIFT VALLEY FEVER (SUDAN), 14 Oct 2019, Arbaat in El Ganeb locality in Sudan's Red Sea state reported 10 new cases of suspected Rift Valley fever* on Monday and Tuesday [7 and 8 Oct 2019], bringing the total number of registered cases to 5, and 3 deaths. Read More: https://www.promedmail.org/post/6726806

LECTIN POISONING (SWEDEN), 14 Oct 2019, Livsmedelsverket has warned people to correctly soak and cook dried legumes such as beans, peas and lentils after they were linked to a large food poisoning outbreak at a school. Read More: https://www.promedmail.org/post/6726805

LEISHMANIASIS, CUTANEOUS (**LIBYA**), 13 Oct 2019, 150 persons with leishmaniasis disease arrived in Tawergha hospital on Friday [11 Oct 2019], and the number of affected people is increasing, the hospital said. Read More: https://www.promedmail.org/post/6724956

LEGIONELLOSIS (**CANADA**), 13 Oct 2019, Local health officials are working diligently to pinpoint the source of an outbreak of legionnaires' disease in Orillia. Read More: https://www.promedmail.org/post/6724136

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health 300 W. Preston Street, Suite 202, Baltimore, MD 21201 Fax: 410-333-5000

Peter Fotang, MD, MPH Epidemiologist, Biosurveillance Program

Office: 410-767-8438

Email: Peter.Fotang@maryland.gov

Jennifer Stanley, MPH Epidemiologist, Biosurveillance Program

Office: 410-767-2074

Email: Jennifer.Stanley@Maryland.gov

Jessica Acharya (Goodell), MPH Career Epidemiology Field Officer, CDC

Office: 410-767-6745

Email: Jessica.Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

